Signature Assignment: Test Administration, Results, and Interpretation

Kassandra E. Miller

Arizona State University

**Test Administration**

Over the past three months I have been assessing the skills and abilities of a student through a series of assessments in the academic areas of reading, writing, and math. The first assessment that was administered was a curriculum based assessment called the CORE Phonics Survey. This curriculum based measure determines the student’s ability levels in the areas of phonemic awareness and phonics in the subcategories of decoding, segmenting, and blending. The initial part of the survey asks the student to identify the names and sounds of given consonants, short vowels, and long vowels. The second section of the survey asks students to read a variety of real and non-sense words with varying elements and characteristics such as CVC, digraphs, r- and l- controlled diphthongs, and multisyllabic words. The final portion of the survey asks students to listen to a word read and then write down their initial and last sounds and then the whole word. In order to complete these activities the student must be strong in the areas of segmenting and blending phonemes. The assessment as a whole focused on determining the student’s comprehension of letters, their phonemes, and blending them together to decode and spell whole words. The CORE Phonics Survey yields analytic results and scores in the form of percentages. At the beginning of the administration of the CORE my student appeared calm and interested in the material within the assessment. By the time we reached the second part of the assessment my student began getting anxious and antsy. Where once I had a clam, relaxed, confident student I suddenly had a student who was fidgety, looking around the classroom, wiggling in his seat, and moving his arms around. At the beginning of the assessment, when the questions were relatively easy, the student was confident in his answers and performance. Once the student began struggling to find an answer to the questions asked I immediately noticed this noted change in his behavior and appearance. However, the CORE Phonics Survey is a short assessment and almost as soon the change in behavior began the assessment in all was complete and the process was finished. Over the next several days after the curriculum based assessment I worked with the student to complete the [Wechsler Individual Achievement Test](http://www.pearsonassessments.com/HAIWEB/Cultures/en-us/Productdetail.htm?Pid=015-8984-609) also known as the WIAT III.

The WIAT III is an extensive instrument that determines an individual’s academic achievement in the scholastic areas of reading, writing, mathematics, and oral language. It’s scores are calculated in a variety of forms including analytic standards scores, percentile ranks, grade equivalence, and age equivalence. For the purposes of this assignment I merely focused on the areas of reading, writing, and math. Within each academic area that is assessed there are a variety of sub-skills that are measured. In the area of reading there are four sub-categories that are measured including word reading, pseudoword decoding, reading comprehension, and oral reading fluency. The word reading subtest measures the student’s speed and accuracy of reading single words. The pseudoword decoding subtest measures the student’s speed and accuracy of decoding skills by reading a given list made-up or nonsense words. The reading comprehension subtest measures the student’s comprehension skills in both the literal and inferential forms. Lastly, the oral reading fluency subtest measures the student’s speed and accuracy of reading anecdotal and informative pieces of writing.

In the area of writing there are three sub-categories that are measured including sentence composition, essay composition, and spelling. The sentence composition subtest measures the student’s ability to accurately formulate sentences including the use of the skills of morphology, grammar, syntax, semantics, and mechanics. The essay composition subtest score is determined by having the student write a short passage in response to a prompt. This writing subtest measures the student’s ability to produce a well written piece of writing including the use of expression, theme development, organization, grammar, and mechanics. Lastly, the spelling subtest measures the student’s ability to accurately spell, in written form, single sounds and words given orally.

In the area of mathematics there are three sub-categories that are measured including math problem solving, numerical operations, and math fluency in the areas of addition, subtraction, and multiplication. The math problem solving subtest measures the student’s ability to solve for problems which evoke reasoning skills that relate to basic concepts, everyday practices, geometry, algebra, and fractions. The numerical operations subtest measures the student’s ability to accurately solve for math problems by relying on written mathematics skills including but not limited to addition, subtraction, multiplication, division, fractions, algebra, geometry, and calculus. Lastly, the math fluency subtests measure the student’s speed and accuracy of solving for written calculation problems in the areas of addition, subtraction, and multiplication.

**Results**

As stated above, the first test administered to the student was a curriculum based measurement known as the CORE Phonics Survey. In all, the student performed well on the phonics survey. In the first portion of the assessment, which determined the student’s level of ability in identifying and decoding individual letters, the student scored 84 points which gave him a 99%. There were a total of four sections which added up to a total of 85 points; 26 points for identifying upper case letters, 26 points for identifying lower case letters, 23 points for decoding consonant sounds, and 10 points for decoding vowel sounds. For the second portion of the assessment, which determined the student’s level of ability for decoding one syllable words, the student scored 62 points out of 70, giving the student an 88%. On the third portion of the assessment, which assessed the student’s level of ability to decode multisyllabic words, the student scored 16 out of 24 points, ultimately giving him a score of 66%. The final section of the assessment, which measured the student’s ability to segment and blend phonemes, the student received a 18 out of 20 points, giving the student a 90%. Ultimately, the student is well educated on the rules and ideas of phonics and how it works within our language. As you will soon discover, the student scored relatively well on the reading subtests of the WIAT III as well which further supports the theory that the student’s strengths lay within the category of reading.

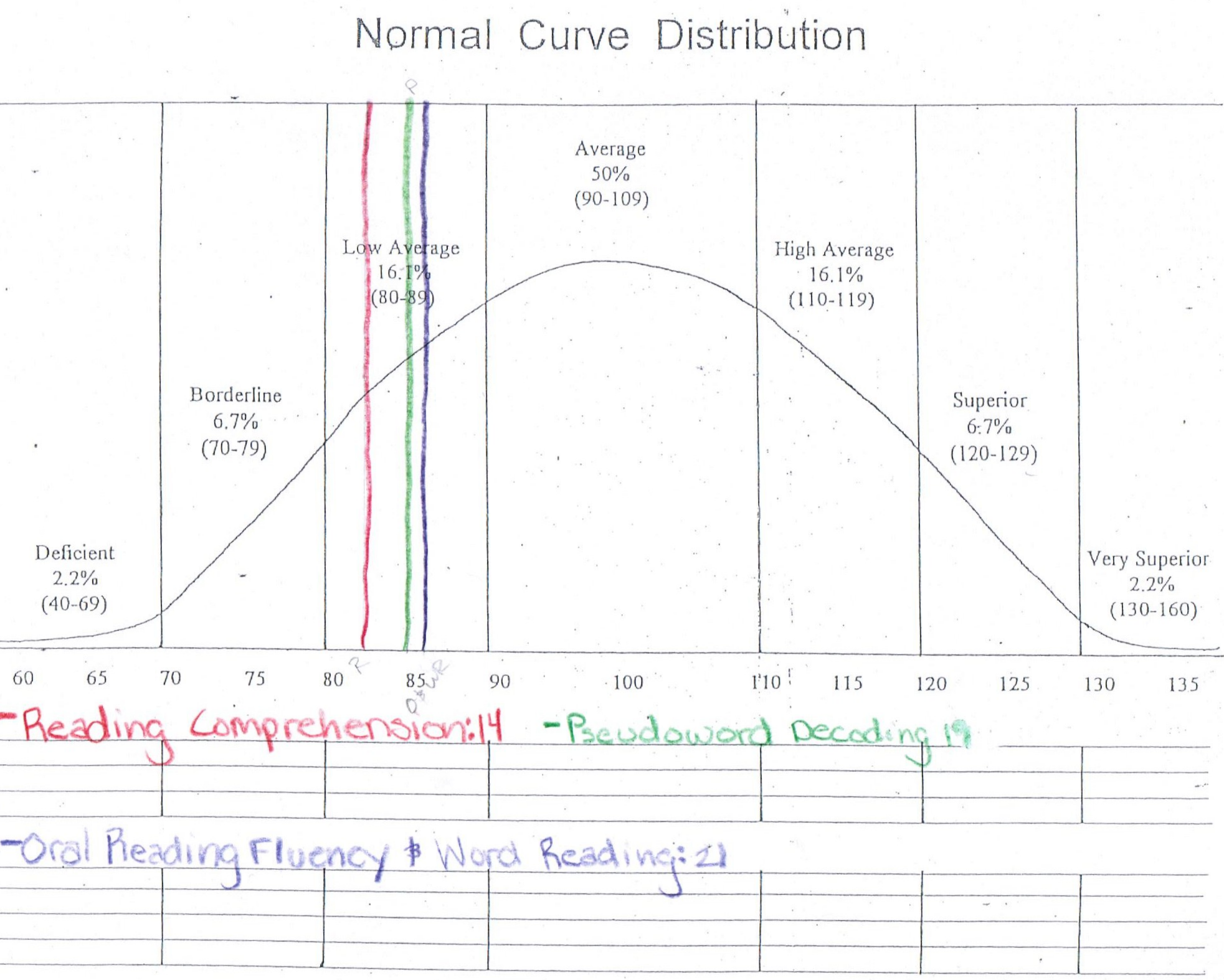
The WIAT III scores each subtest in five different ways including standard score, 90% confidence interval, percentile rank, grade equivalence, and age equivalence. For the purposes of this assignment I merely focused on the student’s scores in the area of standard scores. The scoring scale for standard scores in all areas measured within the WIAT III is as follows: Superior: 130-120, High Average: 120-110, Average: 110-90, Low Average: 90-80, Borderline: 80-70, and Mild Impairment: 70-55. In the academic area of reading the student averaged a score of low average as evidenced by the four sub-category tests of word reading, pseudoword decoding, reading comprehension, and oral reading fluency. In the academic area of writing the student averaged a score of low average as evidenced by the three sub-category tests of sentence composition, essay composition, and spelling. Lastly, in the academic area of mathematics the student averaged a score of average as evidenced by the three sub-category tests of math problem solving, numerical operations, and math fluency.

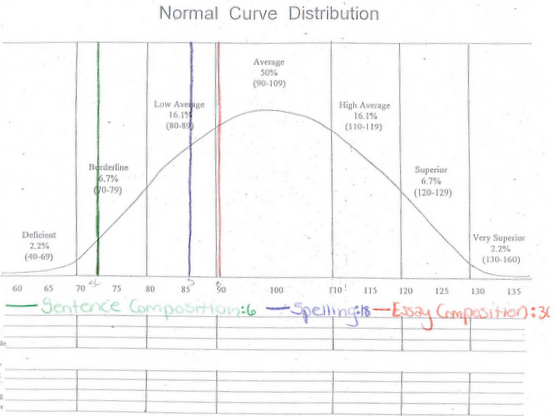
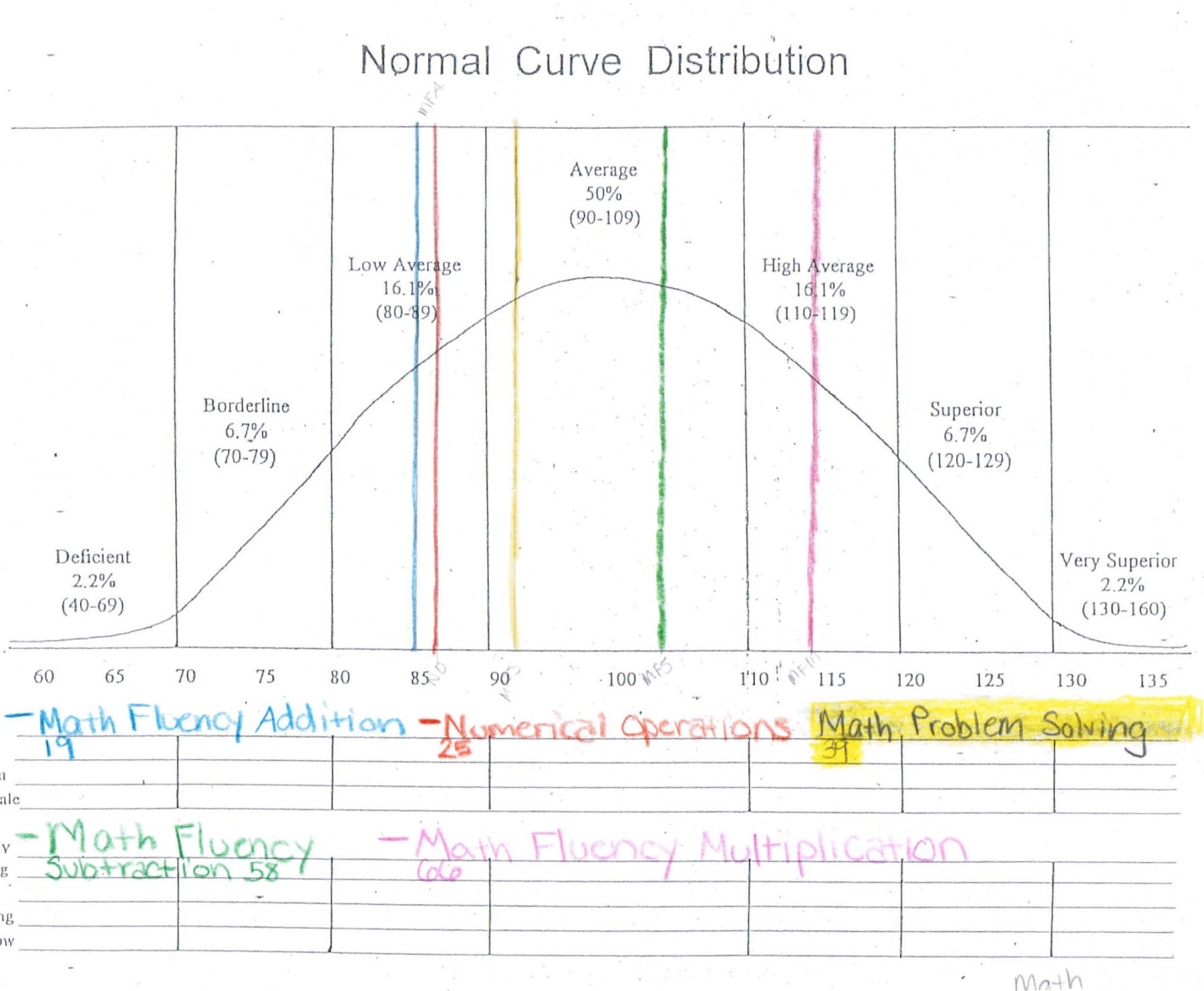
In the area of reading the student received four separate standard scores for each subtest that was administered. For the assessment of word reading the student received a standard score of 88 on the subtest which places his performance in the low average range. For the assessment of pseudoword decoding the student received a standard score of 87 on the subtest which places his performance in the low average range. For the assessment of reading comprehension the student received a standard score of 84 which places his performance in the low average range. Finally, for the assessment of oral reading fluency the student received a standard score of 88 which places his performance in the low average range.

In the area of writing the student received three separate standard scores for each subtest that was administered. For the sentence composition assessment the student received a standard score of 77 which places his performance in the borderline range. For the essay composition assessment the student received a standard score of 92 which places his performance in the average range. Finally, for the spelling assessment the student received a standard score of 86 which places his performance in the low average range.

In the area of mathematics the student received five separate standard scores for each subtest that was administered. For the math problem solving subtest the student received a standard score of 96 which places his performance in the average range. For the numerical operations assessment the student received a standard score of 90 which places his performance in the average range. Finally, for the math fluency assessment the student received the following standard scores for each area: Addition: 87, Subtraction: 103, and Multiplication: 106. Based on the student’s received standard scores in math fluency his performance levels are respectively low average, average, and average.

I also took the student’s test results in the form of percentile ranks and placed them on a bell curve to show where his performance levels fall. Below are the three separate bell curve graphs for the academic areas of reading, writing, and math. Each subtest score is represented in a different color and is stated below the graph with its calculated percentile rank.





**Interpretation**

As previously stated above, the student shows incredible strengths in the areas of decoding consonants, short vowels, long vowels, as well as in segmenting and blending phonemes.. The high scores in the areas mentioned, objectively proves the student requires no further instruction or assistance in comprehending the concepts. The student’s scores in decoding one syllable words, while strong, did indicate that having a bit more practice could be beneficial. The student scored 4/5 on most non-sense words for all categories as well as for both real and non-sense words in the category of consonant blends with short vowels. Although receiving an 80% for most sections in this portion isn’t horrible, the student, with more practice, has the potential to further grasp the concept of decoding these types of words. The area where the student showed most room for improvement was in the area of decoding multisyllabic words. The student received a 66% for the entire portion. Perhaps if the student works on more on decoding one syllable words improvement could also be made in the area of decoding multi-syllabic words. As with the area of decoding individual consonants and vowels, the student show tremendous ability in the area of segmenting and blending phonemes so no further instruction is required, although constant practice is advised. Although the student performed exceptionally well on the majority of the subtests within the CORE Phonics Assessment, as you will discover below, there were many areas within the WIAT III in which the student’s scores reflect much needed instruction and practice.

As evidenced by the scores obtained on the WIAT III based on the student’s performance, the student exhibits academic strengths in the area of mathematics, more specifically in the sub-categories of math fluency and math problem solving. Looking back on the student’s scores in the math fluency subtest the student received a 103 and 106 for subtraction and multiplication which strongly confirms the conclusion that the student can solve for these types of math problems with great speed and accuracy. On the contrary, the student exhibits room for improvement in the area of sentence composition. When given two or more short sentences the student experienced great difficulty in combining them to construct a sound and fluent sentence.

As previously stated, the student received standard scores of 88 for word reading, 87 for pseudoword decoding, 84 for reading comprehension, and 88 for oral reading. Although the student received a performance placement of low average in each of the four sub-categories of reading and does show possible room for improvement this is not an area of great concern. In support of this while administering the reading portions of the assessment to the student he did not seem to struggle or become frustrated with the degree or rigor of the material. In further support of the idea the student’s scores in reading do not require concern is that the WIAT III states a score of 76 or below warrants further investigation and as evidenced by the scores and the demeanor of the student reading is not an area in which the student exhibits weaknesses.

As previously stated, the student received standard score of 77 for sentence composition, 92 for essay composition, and 86 for spelling. As easily seen by the scores obtained on the writing subtests administered to the student the area of sentence composition is one in which further attention and concern should be taken. An interesting observation about the scores obtained by the student however is the difference of his sentence and essay composition scores. It is interesting to see that the student did so much better in the essay composition portion of the assessment considering he had to construct and combine sentences together to form a strong piece of writing using the same skills need for the sentence composition portion. The scores beg to answer how it is possible he did not perform as strongly in the basic portion of writing, sentence composition, but performed so much stronger in the more complex portion of essay composition.

In conclusion, as based on the above results and interpretations with continued practice in areas of strengths and further instruction and applied activities in the areas indicating weakness the student will begin to show improvement in his lacking phonics skills which will ultimately affect his reading, writing, and content based areas. In terms of the student’s performance on the WIAT the student exhibits amazing strengths in the areas of mathematics. The one area where the student exhibited room for improvement above all the rest was in the math fluency subtest for addition. I believe because the student has been focusing on multiplication so strongly on a daily basis in his classroom that that is the reason for his increased skill level so perhaps with some time and practice on addition his skills will be refined and sharpened. In all, the student appears to be performing at average to low average levels in the majority of academic areas. With increased practice, instruction, and volumes of materials the student has the potential to increase his performance levels and accuracy of skills in reading fluency, sentence composition, and addition math fluency.